raised jugular venous pressure, as in this woman. Both conditions produce a pansystolic murmur at the left sternal edge. A high pulmonary artery oxygen saturation in a patient with a low cardiac output gives the diagnosis when echocardiography is not available.

AJR: Is there ever any confusion between acquired and congenital ventricular septal defects when someone presents with an infarct?

CMO: Patients with a congenital condition usually know their diagnosis and also would have a murmur at the outset, unlike people with an acquired ventricular septal defect. Most congenital ventricular septal defects in adults are perimembranous and have a different location in the echocardiogram.

AJR: What causes ventricular septal rupture?

CMO: The underlying pathological finding is transmural infarction. Coronary angiographic studies show that about 40-50% of patients have single vessel disease and seem to have fewer collateral vessels to the septum. This may explain the full thickness necrosis.[7]

PKM: Whether treatment with streptokinase affects the incidence of septal rupture is unclear,[18] but rupture seems to occur earlier, at around 24 hours, in patients who have been given thrombolysis.[19]

GJD: Elderly people, women, and those with hypertension seem to be at greatest risk. Many patients who die of myocardial infarction do so because of cardiac rupture; this just happens to be an internal rupture. The fact that mortality from infarction is higher in elderly people might be explained by the frailty of their tissues or the more advanced state of their coronary disease as they do not seem to have larger infarcts.

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Medicine in Europe

The changing scene in general practice in Europe

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Europe is currently in a state of flux, not just in political and economic terms, but also with regard to medicine. Changes in the provision of medical care have been common throughout both western and eastern Europe.[1] The changes have two main determinants: the need to match limited resources to increasing health care demands, and—especially in central and eastern Europe—the search for new health care philosophies allied to new methods of financing and delivery.

Within this process of change, primary medical care is of increasing importance. In many countries hospital based care has traditionally been overvalued and emphasised to the neglect of the appropriate funding and development of primary care. This has led to the inefficient use of both primary and secondary care sectors, often with a lack of proper cooperation and integration. Growing value is placed on the role of the well educated and trained generalist at the primary level. This is clear from developments in the United Kingdom, Holland, Denmark, Sweden, Finland, Spain, and Portugal. From the countries of central and eastern Europe, in which Soviet-style health systems have increasingly failed to meet patients' needs, come numerous requests for information, literature, and expertise on topics such as the principles of primary health care, the role of the family physician, education and training of general practitioners, and the development of the discipline of general practice in both academic and medicopolitical terms.

Diversity in general practice

General practice throughout Europe is diverse in its development, organisation, and funding. Some aspects of this diversity can be seen clearly from table I, which shows the numbers of doctors in European countries and the percentage of general practitioners. Table II indicates the considerable variety in consulting patterns by general practitioners throughout the European Union. In spite of this considerable diversity, which has many underlying causes involving human resources, the organisation of health systems, the status of the discipline in individual countries, levels of payment to doctors, and systems of payments, there is an increasing sense of the links between general practitioners throughout Europe.

In the search for different ways of providing health care, the various models of national health systems and the debates that occur within these systems provide examples of current practice. The Dutch government's recent report, *Choices in Health*,[2] is noteworthy in this context. What is clear from developments throughout Europe is the eclecticism of the approach of govern-

TABLE I—*Population and medical manpower by country, 1991*

	Population (million)	Doctors (per 100 000 population)	
		All doctors	No (%) of general practitioners
France	51·0	272	147 (54)
Germany (DDR)	16·5	252	127 (50)
Belgium	9·8	357	163 (46)
Republic of Ireland	3·5	149	63 (42)
United Kingdom	56·9	130	54 (42)
Yugoslavia	23·1	166	70 (42)
Germany (FRG)	61·1	290	99 (34)
Switzerland	6·6	171	58 (34)
Norway	4·2	230	66 (29)
Italy	57·0	388	102 (26)
Denmark	5·1	268	67 (25)
Hungary	10·6	331	78 (24)
Portugal	10·3	274	61 (23)
Netherlands	14·7	235	43 (18)
Spain	39·0	336	50 (15)

Source: Concerted Action Committee of Health Services Research for the European Union and European General Practice Research Workshop. *The European study of referrals from primary to secondary care.* London: Royal College of General Practitioners, 1992: table 6.1. (Occasional paper 56.) Reproduced with permission of the publisher.

TABLE II—*General practice consultations, 1991*

	No of consultations in average working week	Population (millions)	No of general practitioners (thousands)
Germany (FRG)	220	61·1	31·0
Germany (DDR)	207	16·5	21·0
Hungary	200	10·6	8·3
Yugoslavia	188	23·1	16·0
Switzerland	150	6·6	3·8
Netherlands	142	14·7	6·3
Belgium	135	9·8	16·0
Republic of Ireland	135	3·5	2·2
Spain	134	39·0	19·5
United Kingdom	128	56·9	31·0
Italy	115	57·0	58·0
Denmark	98	5·1	3·4
France	82	51·0	75·0
Portugal	81	10·3	6·3
Norway	60	4·1	2·7

Source: Concerted Action Committee of Health Services Research for the European Union and European General Practice Research Workshop. *The European study of referrals from primary to secondary care.* London: Royal College of General Practitioners, 1992: table 6.2. (Occasional paper 56.) Reproduced with permission of the publisher.

ments, health planners, economists, and the health profession. As Ham *et al* and Warden have pointed out, there is a clear convergence in the development of health systems.[3,4] Countries with essentially market oriented systems are depending more on regulation and cost containment, and countries with health systems based on careful planning and control are adopting more market based structures. Ham *et al* were struck during their investigation by the limited exchange of experience and evidence between countries; they argued for a higher priority to be given to this activity in the future.[3]

The increasing development of and emphasis on primary medical care, the growing confidence of the discipline, with a deepening of its academic base in both education and research, will inevitably lead to tensions—both within the medical profession as a whole and between specialist disciplines and general practice, particularly in health systems where the roles of the general practitioner and specialist have not developed in a complementary manner as they have, for example, in the United Kingdom, Holland, and Denmark. In countries where the general practitioner has little or no gatekeeping function in relation to secondary care, patients have free access to specialists working in the community and often to specialists working in hospitals. This structure and the payment system, through fees and item of service payments, give rise to considerable competition between general practitioners and specialists and also between individual general practitioners. Tensions are also likely to arise within health systems between specialist disciplines and primary medical care over the allocation of resources.

Standards for training

The 1986 European Community directive[5] dealing with postgraduate training for general practice is slowly being implemented, though progress is decidely patchy. Each member country had to set up training schemes by 1990, and from 1995 all doctors becoming established as general practitioners in the social security system of a member state must have had a minimum of two years' specific training. Implementation of the directive is being delayed by inadequate numbers of training posts in hospitals, inadequate funding from governments, and the slow development of a sufficient number of general practice trainers. In June 1992 the European Union of General Practitioners (UEMO) adopted the statement on criteria for GP trainers[6] to provide a benchmark of quality for the development of postgraduate teaching for general practitioners. In addition to the slow development of postgraduate training, the current provisions of the directive are considered to be inadequate by UEMO, the Royal College of General Practitioners, and the BMA. Representations are being made to the European Commission for an extension of the training period to three years when the directive is due for review in 1995/6.

The slow development of appropriate training standards exemplifies the difficulty in reaching satisfactory agreement, and implementing such agreement, among the member states of the European Union. Given the possible enlargement of the Union in the relatively near future—first with the addition of most of the seven member states of the European Free Trade Association and in the medium term with the possibility of membership of countries of central Europe—it is likely that the systems of decision making and implementation currently operating within the Union will be wholly inadequate in ensuring that comparable high standards of medical education and practice can be maintained. New thinking is required with regard to these problems on the part of the medical profession, national governments, and the European Commission.

Interests and roles of European organisations

Over the past two to three years there has been increasing activity among European general practice bodies. This reflects the growing importance of the discipline in European medicine and the increasing confidence, particularly in the areas of undergraduate education, postgraduate education and training, continuing medical education, quality assurance, and

Development of European Union directive on general practice vocational training

1986 Directive: minimum period of training two years

1990 Establishment of training programmes throughout European community

1995 Two years' training a legal requirement for all new general practitioners practising in European Union member states' health systems

1996 Review of directive by European Commission (RCGP, BMA, and UEMO aim to increase minimum period of training to three years)

European general practice organisations

European Union of General Practitioners (UEMO)
Danish Presidency 1990-4: Danish Medical Association, Domus Medica, Tronhjemsgade 9, DK 2100 Copenhagen, Denmark
tel (45) 35 761460; fax (45) 31 385507

WONCA European Working Party on Quality in Family Practice (EQUIP)
Professor R Grol, Department of General Practice, University of Nijmegen, PO Box 9101, 6500 HB Nijmegen, Netherlands
tel (31) 80 615302; fax (31) 80 541862

International Society of General Practice (SIMG)
Dr E Hesse, Bahnhofstrasse 27, D-2805 Stuhr 1, Germany
tel (49) 421 895849; fax (49) 421 808801

European General Practice Research Workshop (EGPRW)
R Kocken and N Geraerts, Coordination Centre Primary Care, University of Limburg, PO Box 616, 6200D Maastricht, Netherlands
tel (31) 43 88 2281; fax (31) 43 61 9344

Euro-Centre-PHC
Via Marzia 18, 06100 Perugia, Italy
tel (39) 75 6962487; fax (39) 75 6962487

European Academy of General Practice Teachers (EURACT)
Dr T Allen, The Firs, Main Street, Bruntingthorpe, Lutterworth, Leicestershire LE17 5QF, United Kingdom
tel (44) 0533 776336

World Health Organisation (Europe) Primary Health Care
8 Scherfigsvej, DK-2100 Copenhagen, Denmark
tel (45) 31-29 01 11; fax (45) 31-18 11 20

UK Nordic Medical Education Trust
Dr P Pritchard, 31 Martins Lane, Dorchester, Wallingford, Oxfordshire OX10 7JF, United Kingdom
tel (44) 0865 340008

World Organisation of Family Doctors (WONCA)
Secretariat: Dr W Fabb, Department of Community and Family Medicine, Chinese University of Hong Kong, 4th Floor, Lekyuen Health Centre, Shatin, New Territories, Hong Kong
tel (852) 692 8772; fax (852) 606 3500

research. In the past there has been a lack of contact between many of these bodies. The divisions within the medical profession—noticeable at national level in many European countries not just between the medicopolitical and academic wings of the profession but also between rival bodies with similar or overlapping, functions seeking to obtain representative status and power—have unfortunately been evident at international level. With the growing importance of general practice, an understanding of the need for cooperation between bodies with complementary roles is gradually developing. One encouraging outcome of this was the organisation, at the suggestion of the International Society of General Practice (SIMG), of a joint meeting of most of the European general practice organisations. The meeting took place in Lenzburg, Switzerland, in January 1993 and has led not only to a better understanding between the bodies of their interests and roles but to an agreement for closer cooperation in the future.

SIMG and the European branch of WONCA (the World Association of National Colleges, Academies and Academic Institutions of General Practice and Family Medicine) having similar roles, set up a working party with the remit of formulating proposals for the full integration of the two bodies. It is also proposed that the European organisations with specific interests in general practice education (EURACT; the European Academy of General Practice Teachers) and research (EGPRW; the European General Practice Workshop) would be closely related within the new structure, giving rise to a unified academic grouping for European general practice. Such a body would be well placed to promote the academic development of the discipline in Europe in cooperation with UEMO, the representative medicopolitical European body for general practice.

The cooperation between WONCA and SIMG was exemplified by the recent conference on quality in general practice jointly hosted by them and the Dutch college of general practitioners in The Hague in June 1993: 1600 participants from the whole of Europe contributed to a highly successful meeting. Two outcomes of the meeting were the publications *Health Care and General Practice across Europe* and *Quality assurance in general practice: the state of the art in Europe.*[7,8]

EUROPEAN UNION OF GENERAL PRACTITIONERS

Under its current enterprising and efficient Danish presidency, the European Union of General Practitioners (UEMO) is fulfilling an important role as the leading European general practice organisation in the medicopolitical field. It is actively seeking the cooperation and collaboration of the European academic groups, such as WONCA, SIMG, EURACT, and EGPRW. UEMO is made up of national delegations from the most representative general practice body in each member country. Representation for the United Kingdom is shared between the BMA and the Royal College of General Practitioners.

In the past year, after the changes in eastern and central Europe and the imminent linking of European Union countries with those of the European Free Trade Association (EFTA), UEMO has opened its doors to all European contries. In addition to the 12 European Union states, Norway, Sweden, Finland, and Switzerland have become members. UEMO's role is to act as a political forum representing the interests of general practice, particularly in relation to postgraduate training, continuing medical education, quality assurance, practice organisation, and funding. These objectives are clearly expressed in its 1992 policy statement.[9]

WONCA

The increasingly important role of WONCA in Europe can be gauged by its first successful European conference in Barcelona three years ago and the publication of two important documents. The first, entitled *The Role of the General Practitioner/Family Physician in Healthcare Systems*, has received wide circulation.[10] This booklet aims to support the development of high quality medical care, as clearly expressed in its foreword: "High quality primary health care depends on the availability of well-trained general practitioners or family physicians as members of healthcare teams in the community. The discipline of general practice/family medicine needs to be firmly established as the central discipline of medicine around which medical and allied health disciplines are arranged to form a cooperative team for the benefit of the individual, the family and the community."

The second publication is the initial report of EQUIP, WONCA's European working party on quality and family practice.[11] This booklet outlines the proposed development of Europe-wide quality assurance initiatives in general practice. This work has continued and resulted in The Hague conference's publications.[7,8]

EUROPEAN GENERAL PRACTICE WORKSHOP

The European General Practice Workshop is a collaborative organisation of general practice

A WONCA cricket eleven played a local Dutch club side at the end of the WONCA/SIMG conference in the Hague

researchers from 20 European countries. Meetings are held twice a year for the purpose of the presentation of papers and discussion and a joint meeting was held with the Royal College of General Practitioners in Nottingham in April 1992. During the past two years the workshop has produced two important studies, published by the royal college as occasional papers. These deal with the interface between primary and secondary care[12] and referral patterns throughout Europe.[13]

EUROPEAN ACADEMY OF GENERAL PRACTICE TEACHERS

EURACT was formed in 1992 from the New Leeuwenhorst Group, which for many years acted as an informal think tank on general practice educational topics. The new body seeks to involve teachers of general practice, at both undergraduate and postgraduate level, and to provide meetings, both national and international, for the development of ideas and the exchange of information, in order to improve the standing and quality of general practice education.

OTHER GROUPS

Eurocentre PHC is another new group, based jointly in London and Perugia, Italy. Its initial aim is to seek to develop a Europe-wide research database in general practice and to act as a resource centre.

The UK/Nordic Medical Education Trust has been increasingly active in the past few years, developing exchanges and meetings for education, research, and training relating to primary health care between Britain and the Nordic countries.

Role of the WHO

The World Health Organisation's regional office for Europe in Copenhagen has, since 1989, been conspicuously active in helping develop primary health care, particularly in the changing situation in central and eastern Europe. The large number of requests that have been received from these countries has caused the WHO to lay considerable emphasis on the development of general practice. Examples of this have been the many meetings that it has organised and sponsored throughout Europe, including one in Perugia in 1991, the report of which outlines the potential future development of the discipline in Europe.[14]

WHO Europe is currently looking at ways of setting out more clearly the essential features of general practice and the ways in which it can be fostered and developed. Initiatives it has already taken include its European Alcohol Action Plan, one of the main objectives of which is to develop the role of general practice and health promotion, prevention, and treatment in relation to alcohol problems.[15]

The future

Given the difficulties of providing health care throughout the continent of Europe it seems likely that general practice will have the opportunity of playing an increasingly important part. The potential for further development of the discipline is certainly clear, both in relation to the needs of patients and the societies in which they live and also in the growing confidence of the discipline with regard to its ability to accept the challenge modern health care presents. It is vital that developments in education, research, and the practical delivery of primary care continue, not in any spirit of competition with other medical disciplines or the allied professions, but with appropriate collaboration and interdependence.

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Correction

American and European recommendations for screening mammography in younger women: a cultural divide

An authors' error occurred in this article by Ismail Jatoi and Michael Baum (4 December, pp 1481-3). In the section on cost (p 1483) a 0·125% absolute reduction in deaths corresponds to one life saved for every 800 women screened over 10 years and not one life for every 1250 women screened.